

ABSTRACT OF THE DISCLOSURE

A method for coating the inside surface (5) of a gun barrel (1), at least in a partial region (2), with a layer of a layer material (9) for avoiding erosion. For the simple application of layer materials that melt at high temperatures to the inside surface (5) of the gun barrel (1), with the internal-stress state of the barrel (1) only being influenced to a small extent by the heat input, the coating is applied to the inside surface of the respective barrel (1) through plasma spraying, and simultaneously directing a laser beam (7) toward the inside surface (5) of the barrel (1), to melt the near-surface gun-barrel region (10) that is already coated or is to be coated. This causes the formation of a molten bath (11) that contains the melted gun-barrel material and the layer material in the near-surface region (10) of the barrel, with the bath hardening as the laser beam (7) continues to move.